

## State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.

Commissioner

Mr. Cristopher Anderson Director, Environmental Affairs L.E. Carpenter & Company 200 Public Square Suite 36-5000 Cleveland, OH 44114-2304

03 1997

Dear Mr. Anderson:

Re: L.E. Carpenter Superfund Site Wharton, Morris County

The following are comments provided by the USEPA regarding the Remedial Action Plan for Phase I - Free Product Recovery which is dated February 21, 1997. As you are aware, the New Jersey Department of Environmental Protection provided comments on this plan in a letter dated April 17, 1997.

## USEPA's General Comments

- 1. According to the work plan, the free product plume is relatively stable and is present in thicknesses of up to three feet: However, no discussions or calculations are provided to support the conclusions. If the reported free product thicknesses are based on bore product thickness only, this could result in significant errors in estimating drainable product volume. The apparent free product thickness, indicated by well bore product thickness, is typically much greater than the actual free product thickness in surrounding soil. If the reported free product thicknesses are based on adjusted measurements please provide any relevant data and equations used to predict actual product thickness.
- 2. L.E. Carpenter should consider the installation of extraction trenches in the free product plume areas to enhance recovery and minimize the amount of water extracted. Due to the shallow water table, extraction trenches should be seriously considered from both a productivity and cost-effectiveness standpoint as each extraction trench could replace several of the proposed vertical extraction wells. Limiting factors, such as large water table fluctuations and the presence of underground utilities should be investigated.

## USEPA's Specific Comments

3. Page 4, Section 2.4, Soil Cuttings, Well Development Water and Decontamination Water Disposal - It is stated that "Due to the presence of free product, decontaminating the drilling equipment between wells is not necessary and would add little to no benefit." This statement is incorrect. Contaminated material that adheres to the surface of drilling



equipment may be transferred to uncontaminated surface and subsurface soil above the free-product contaminated soil. Drilling equipment must be decontaminated between boreholes to prevent cross-contamination.

4. Page 11, Section 3.2, Free-Product Removal Reporting - Free product thickness contour maps should include predicted actual free product thickness data. Apparent (well bore product) thickness data and predictive methods and/or formulas should be included and discussed in the report.

Please feel free to contact me at (609)633-7261 if you have any questions.

Sincerely,

Gwen Barunas, Case Manager Bureau of Federal Case Management

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c: Steve Cipot, USEPA George Blyskun, BGWPA John Prendergast, BEERA